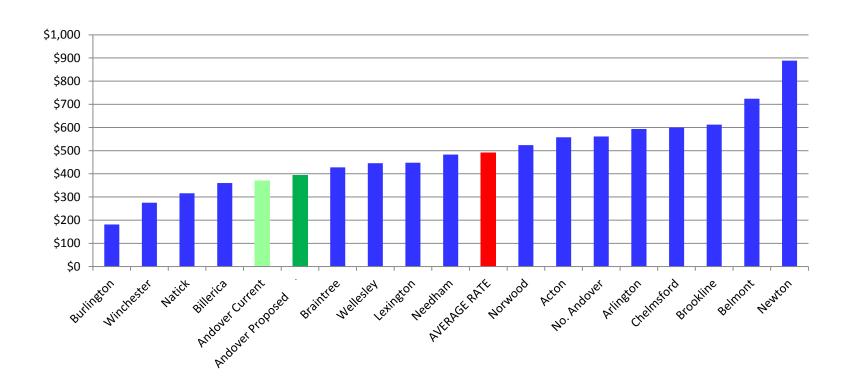
# Water Rate Projection - FY16

5.0% Rate Increase = \$19.20 Inc. for Avg. User

	FY2014 BUDGET	FY2014 ACTUAL	FY2015 BUDGET	FY2016 PROJECTED	FY2017 PROJECTED	FY2018 PROJECTED	FY2019 PROJECTED
WATER COSTS:							
WATER Direct Costs:							
Personal services	1,804,485	1,854,417	1,839,819	1,908,276	1,946,442	1,985,370	2,025,078
Ordinary Maint.	2,477,900	2,731,518	2,495,255		2,674,241	2,754,468	2,837,102
OPEB	77,440	77,440	231,704	250,000	262,500	266,438	270,434
TOTAL DIRECT COSTS	4,359,825	4,663,375	4,566,778	4,754,626	4,883,182	5,006,276	5,132,614
TOTAL INDIRECT COSTS	1,157,138	1,157,140	974,820	1,093,612	1,151,450	1,213,024	1,278,608
TOTAL DEBT SERVICE	1,066,617	1,066,617	1,419,434		1,757,447	1,805,536	1,824,598
WARRANT ARTICLES				•			
TOTAL SYSTEM MAINTENANCE ARTICLE	-		300,000	300,000	300,000	300,000	300,000
TOTAL COSTS	6,583,580	6,887,132	7,261,032	7,800,846	8,092,079	8,324,836	8,535,820
WATER REVENUES							
WATER USE							
Water user rates	6,377,400	7,014,538	6,700,000	7,035,000	7,386,750	7,903,823	8,457,091
RATE factor	101.0%		105.0%		107.0%	107.0%	108.0%
PROJECTED WATER RATE COLLECTION	6,441,174	7,014,538	7,035,000	7,386,750	7,903,823	8,457,091	9,133,658
OTHER REVENUES	240,475	738,961	240,475	310,000	310,000	310,000	310,000
TRANSFER FROM RESERVES				104,096	-		
TOTAL REVENUES	6,681,649	7,753,499	7,275,475	7,800,846	8,213,823	8,767,091	9,443,658
SURPLUS/(DEFICIT)	98,069	866,367	14,443	0	121,744	442,255	907,838
% Self sufficient	101%	113%	100%	100%	102%	105%	111%
New rate	\$2.95	\$2.95	\$3.10		\$3.49	\$3.73	\$4.03
Old rate	\$2.92		\$2.95	<b>\$3.10</b>	\$3.26	<b>\$3.49</b>	<b>\$3.73</b>
Rate increase	\$0.03		\$0.15		\$0.23	\$0.24	\$0.30
Reserve Fund Goal = 20% Water Fund	1,316,716	1,377,426	1,452,206	1,560,169	1,618,416	1,664,967	1,707,164
Starting Balance - Reserve Fund	2,970,387	2,965,797	2,398,456	2,262,899	3,023,067	2,244,812	1,787,067
PY Fund Balance Adjustment				1,419,265			
Transfer from Reserve/Articles	(220,000)	-	(150,000)	(55,000)	(150,000)	(150,000)	(150,000)
Court Judgment	(450,000)	-	-	-	-	-	-
Projects from Reserves		-	-	(500,000)	(750,000)	(750,000)	(750,000)
Inc/ Dec in Reserve Fund	98,069	866,367	14,443	(104,096)	121,744	442,255	907,838
Ending Balance- Reserve Fund	2,398,456	3,832,164	2,262,899	3,023,067	2,244,812	1,787,067	1,794,905
Over(Under) Reserve Goal	82%	178%	56%		39%	7%	5%
Average User 12,000 CF per year	\$354.00		\$372.00		\$418.80	\$447.60	\$483.60
Increase	\$29.88		\$18.00		\$27.60	\$28.80	\$36.00
AVERAGE RATE COMPARABLE COMMUNITY			\$478.20		\$492.46	\$492.46	\$492.46
ANDOVER RATE AS % OF COMPARABLE			78%	79%	85%	91%	98%
AVERAGE RATE MERRIMACK VALLEY			\$569.40	\$573.36	\$573.36	\$573.36	\$573.36
ANDOVER RATE AS % OF MERRIMACK VALLEY			65%	68%	73%	78%	84%

### AVERAGE ANNUAL WATER BILL - PEER GROUP

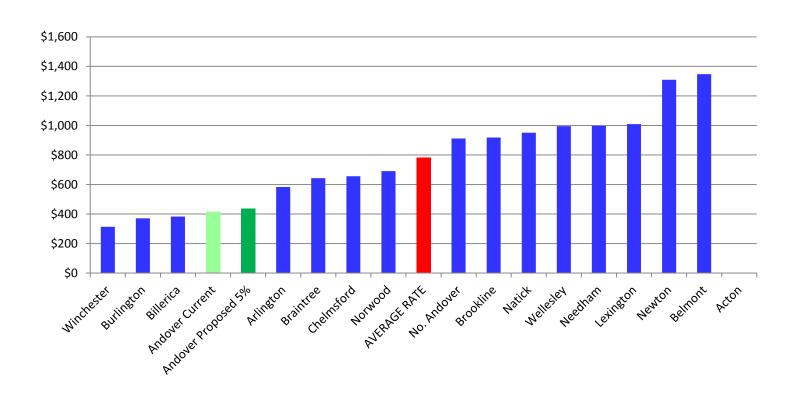


# **Sewer Rate Projection - FY16**

5.0% Rate Increase = \$20.40 Inc. for Avg. User

	FY2014	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
	BUDGET	ACTUAL	BUDGET	PROJECTED	PROJECTED	PROJECTED	PROJECTED
SEWER COSTS							
SEWER DIRECT COSTS							
Personal services	300,921	285,951	301,400	295,150	301,053	307,074	313,216
Ordinary Maint.	337,500	193,721	336,900	339,900	350,097	360,600	371,418
Sewer Assessment	1,600,000	1,513,520	1,706,613	1,800,000	1,845,000	1,891,125	1,938,403
OPEB	0	0	37,335	40,000	42,000	44,100	46,305
TOTAL DIRECT COSTS	2,238,421	1,993,192	2,382,248	2,475,050	2,538,150	2,602,899	2,669,342
TOTAL INDIRECT COSTS	419,647	419,647	376,632	384,134	400,914	418,618	437,308
TOTAL DEBT SERVICE	2,746,552	2,746,552	2,675,132	2,599,737	2,496,772	2,406,473	2,349,276
TOTAL COSTS	5,404,620	5,159,391	5,434,012		5,435,836		5,455,925
SEWER REVENUES							
SEWER USE RATES							
Sewer User Rates	3,500,000	3,863,349	3,780,000	3,780,000	3,969,000	4,088,070	4,210,712
RATE factor	108.0%		100.0%	105.0%	103.0%	103.0%	103.0%
PROJECTED SEWER RATE COLLECTION	3,780,000	3,863,349	3,780,000	3,969,000	4,088,070	4,210,712	4,337,033
OTHER REVENUES	1,433,000	1,586,273	1,326,967	1,179,000	1,140,000	1,106,000	939,888
Transfer from Reserves for Operating	191,619	_	327,045	310,921	207,766	111,278	179,004
TOTAL REVENUES	5,404,619	5,449,622	5,434,012	5,458,921	5,435,836	5,427,990	5,455,925
SURPLUS/(DEFICIT)	-	290,231	-	-	-	-	
New rate	3.47	3.47	3.47	3.64	3.75	3.86	3.98
Old rate	3.21	<u>3.47</u>	<u>3.47</u>	<u>3.47</u>	<u>3.64</u>	<u>3.75</u>	<u>3.86</u>
Rate increase	0.26	0.00	0.00	0.17	0.11	0.11	0.12
Reserve Fund Goal = 20% Sewer Fund	1,080,924	1,031,878	1,086,802	1,091,784	1,087,167	1,085,598	1,091,185
Starting Balance- Reserve Fund	2,390,274	2,390,273	2,365,273	1,873,228	1,562,307	1,354,540	1,243,262
Transfer from Reserve/Articles	(25,000)	(25,000)	(165,000)	-	-	-	
Inc/ Dec in Reserve Fund	(191,619)		(327,045)	(310,921)	(207,766)	(111,278)	(179,004)
Ending Balance- Reserve Fund	2,173,655	2,365,273	1,873,228	1,562,307	1,354,540	1,243,262	1,064,257
Over(Under) Reserve Goal	101%	129%	72%	43%	25%	15%	-2%
Average User 12,000 CF per year	\$416.40	\$416.40	\$416.40	\$436.80	\$450.00	\$463.20	\$477.60
Increase				\$20.40	\$13.20	\$13.20	\$14.40
AVERAGE RATE COMPARABLE COMMUNITY			\$771.79	\$781.01	\$781.01	\$781.01	\$781.01
ANDOVER RATE AS % OF COMPARABLE			54%	56%	58%	59%	61%
AVERAGE RATE MERRIMACK VALLEY			\$633.30	\$633.30	\$633.30	\$633.30	\$633.30
ANDOVER RATE AS % OF MERRIMACK VALLEY			66%	69%	71%	73%	75%

### AVERAGE ANNUAL SEWER BILL - PEER GROUP



## RESERVE FUNDS

as Recommended by AWWA

#### WORKING CAPITAL RESERVE FUND (WCR)

- •Should not be used to make up for long-term revenue shortfalls
- •Should fall into a range that covers 90 days of operation (25% year)

#### REPAIR & REPLACEMENT RESERVE FUND (RRR)

•Intended to be used for system assets that are worn out or obsolete

### **WATER**

WCR 25% Operations \$1,126,157 RRR 2% Net Assets \$1,000,000

Total Reserves Needed \$2,126,157

\*\*water distribution system is not included in asset calculation

### <u>SEWER</u>

WCR 25% Operations \$ 608,763 RRR 2% Net Assets \$1,120,000

Total Reserves Needed \$1,728,763

\*\*sewer collection system is not included in asset calculation

# **MWRA**

# 2014 Combined Retail Water & Sewer Community Charge Comparisons

(Consumption at 120 HCF ≈ 90 kgal)

